

CLAIMS

1. A pneumatic radial tire comprising a radial carcass, a belt disposed outside a crown portion of the carcass in a radial direction and comprised of at least two belt layers, and a belt reinforcing layer
5 disposed outside the belt in the radial direction, characterized in that the belt reinforcing layer is formed by continuously and spirally winding a polyethylene terephthalate cord(s) in a circumferential direction of the tire, and this cord has an elastic modulus of not less than 2.5 mN/dtex·% under a load of 29.4 N measured at 160°C.
- 10 2. A pneumatic radial tire according to claim 1, wherein the cord is treated with an adhesive composition comprising a thermoplastic polymer (A), a heat-reactive aqueous polyurethane resin (B) and an epoxy compound (C), wherein a main chain of the thermoplastic polymer (A) does not substantially have an addition-
15 reactive carbon-carbon double bond but has at least one crosslinkable functional group as a pendant group.
3. A pneumatic radial tire according to claim 1, wherein the cord is treated with an adhesive composition comprising a thermoplastic polymer (A), a heat-reactive aqueous polyurethane resin (B), an
20 epoxy compound (C) and a rubber latex (D), wherein a main chain of the thermoplastic polymer (A) does not substantially have an addition-reactive carbon-carbon double bond but has at least one crosslinkable functional group as a pendant group.
- 25 4. A pneumatic radial tire according to claim 2 or 3, wherein the main chain of the thermoplastic polymer (A) is composed of an ethylenically addition polymer mainly having a straight-chain structure and/or a polyurethane based polymer, and the crosslinkable functional group as a pendant group is at least one selected from the group consisting of an oxazoline group, a bismaleimido group, a (blocked)
30 isocyanate group, an aziridine group, a carbodiimido group, a hydrazino group, an epoxy group and an epithio group.
5. A pneumatic radial tire according to claim 1, wherein the cord is subjected to an adhesive treatment (dip treatment) under a

tension of not less than 6.9×10^{-2} N/dtex.

6. A pneumatic radial tire according to claim 1, wherein the cord has a twisting coefficient α of 500-2500 defined by the following equation (I):

5 $\alpha = T \times D^{1/2} \quad \dots \dots (I)$

(wherein α is a twisting coefficient, T is a twisting number and D is a total fineness (dtex) of the cord).

7. A pneumatic radial tire according to claim 1, wherein the cord has an elongation percentage of not more than 2% in the tire after
10 vulcanization with respect to an original length of the cord before vulcanization.

8. A pneumatic radial tire according to claim 1, wherein the cord has a total fineness of 1000-3500 dtex.